

(FILE 'HOME' ENTERED AT 17:06:43 ON 14 MAR 2003)

FILE 'REGISTRY' ENTERED AT 17:06:53 ON 14 MAR 2003

L1 SCREEN 2067  
L2 STRUCTURE UPLOADED  
L3 QUE L2 AND L1  
L4 7 S L3 FULL

FILE 'CAPLUS' ENTERED AT 17:07:48 ON 14 MAR 2003

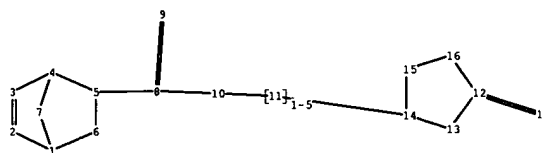
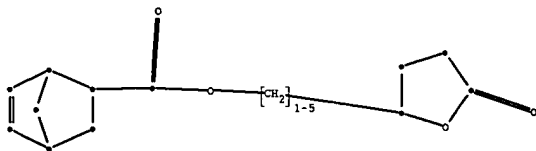
L5 3 S L4

FILE 'REGISTRY' ENTERED AT 17:09:28 ON 14 MAR 2003

L6 SCREEN 2067  
L7 STRUCTURE UPLOADED  
L8 QUE L7 AND L6  
L9 0 S L8 FULL  
L10 SCREEN 2067  
L11 STRUCTURE UPLOADED  
L12 QUE L11 AND L10  
L13 0 S L12 FULL  
L14 SCREEN 2067  
L15 STRUCTURE UPLOADED  
L16 QUE L15 AND L14  
L17 7 S L16 FULL  
L18 0 S L17 NOT L4

FILE 'REGISTRY' ENTERED AT 17:16:53 ON 14 MAR 2003

L19 SCREEN 2067  
L20 STRUCTURE UPLOADED  
L21 QUE L20 AND L19  
L22 0 S L21 FULL  
L23 SCREEN 2067  
L24 STRUCTURE UPLOADED  
L25 QUE L24 AND L23  
L26 0 S L25 FULL  
L27 SCREEN 2067  
L28 STRUCTURE UPLOADED  
L29 QUE L28 AND L27  
L30 0 S L29 FULL  
L31 SCREEN 2067  
L32 STRUCTURE UPLOADED  
L33 QUE L32 AND L31  
L34 0 S L33 FULL

3/14/03  
update search cl5

chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 12-13 12-16 13-14 14-15 15-16

exact/norm bonds :

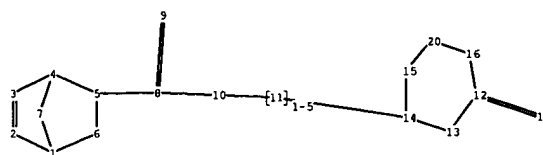
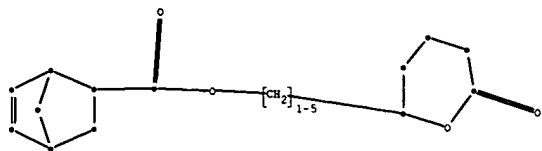
8-9 8-10 12-17

exact bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 10-11 11-14 12-13 12-16  
13-14 14-15 15-16

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS



chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16 20

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 12-13 12-16 13-14 14-15 15-20  
16-20

exact/norm bonds :

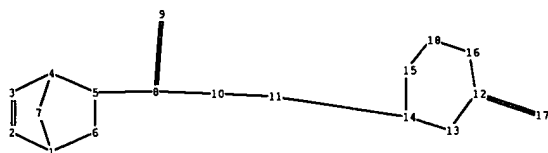
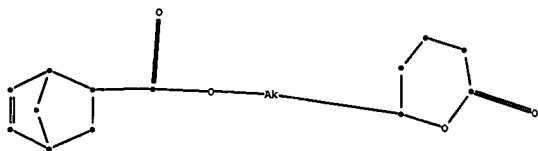
8-9 8-10 12-17

exact bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 10-11 11-14 12-13 12-16  
13-14 14-15 15-20 16-20

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS  
20:Atom



chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16 18

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 12-13 12-16 13-14 14-15 15-18  
16-18

exact/norm bonds :

8-9 8-10 10-11 11-14 12-17

exact bonds :

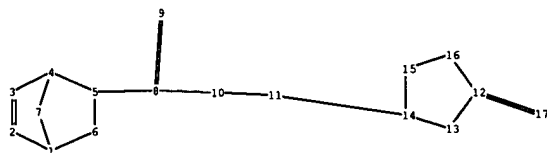
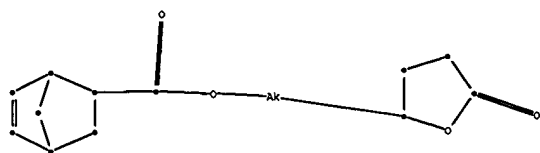
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 12-13 12-16 13-14 14-15  
15-18 16-18

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS  
18:Atom

Element Count :

Node 11: Limited  
C,C1-5



chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 12-13 12-16 13-14 14-15 15-16

exact/norm bonds :

8-9 8-10 10-11 11-14 12-17

exact bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 12-13 12-16 13-14 14-15  
15-16

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS

Element Count :

Node 11: Limited  
C,C1-5

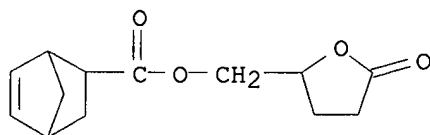
L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS  
 AN 2000:249842 CAPLUS  
 DN 132:300943  
 TI Hydrogenated polymer prepared by metathesis ring-opening polymerization  
 and the use and manufacture of the polymer  
 IN Sunaga, Tadahiro; Takao, Toshiro; Ikeda, Keiichi; Yamamoto, Yoshihiro;  
 Kawahara, Nobuo; Okita, Masumizu  
 PA Mitsui Chemicals Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 42 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000109545	A2	20000418	JP 1999-183991	19990629
	US 6372854	B1	20020416	US 1999-339538	19990624
	TW 445269	B	20010711	TW 1999-88110832	19990628
	KR 2000006560	A	20000125	KR 1999-25544	19990629
PRAI	JP 1998-182916	A	19980629		
	JP 1998-221756	A	19980805		
AB	The hydrogenated polymer involves repeating unit I (R1-R4 are alkyl, halogen, etc., including acid-decomposable group; X1 = O, S, NR, PR, CR; R = alkyl), I (R1-R4 are alkyl, halogen, etc., without acid-decomposable group), and optionally I (gtoreq.1 of R1-R4 is cyano- or lactonyloxycarbonyl-contg. group) and the mol. wt. distribution of the polymer is narrow. The polymer is manufd. by ring-opening living polymn. using metathesis catalysts. The polymer is used as a photoresist, which shows improved adhesion to substrate and suitable for UV or far-UV photolithog. in semiconductor device fabrication.				
IT	<b>264193-12-6DP</b> , hydrogenated RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (ring-opening living polymn. using metathesis catalyst followed by hydrogenation for polymer for photoresist)				
RN	264193-12-6 CAPLUS				
CN	Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (tetrahydro-5-oxo-2-furanyl)methyl ester, polymer with bicyclo[2.2.1]hept-5-ene-2-carbonitrile (9CI) (CA INDEX NAME)				

CM 1

CRN 264193-11-5

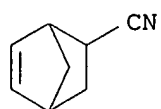
CMF C13 H16 O4

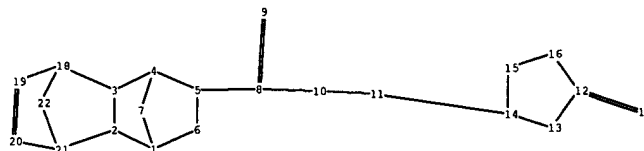
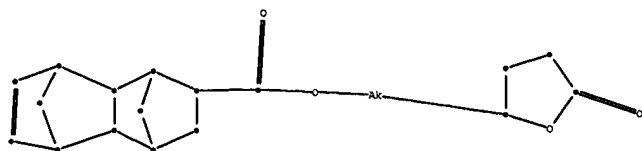


CM 2

CRN 95-11-4

CMF C8 H9 N





chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16 18 19 20 21 22

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 2-21 3-4 3-18 4-5 4-7 5-6 12-13 12-16 13-14  
14-15 15-16 18-19 18-22 19-20 20-21 21-22

exact/norm bonds :

8-9 8-10 10-11 11-14 12-17

exact bonds :

1-2 1-6 1-7 2-3 2-21 3-4 3-18 4-5 4-7 5-6 5-8 12-13 12-16  
13-14 14-15 15-16 18-19 18-22 19-20 20-21 21-22

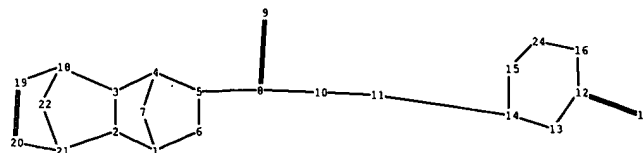
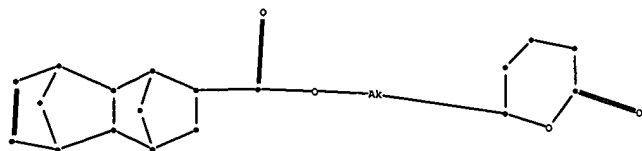
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS  
18:Atom 19:Atom 20:Atom 21:Atom 22:Atom

Element Count :

Node 11: Limited  
C,C1-5





chain nodes :

8 9 10 11 17

ring nodes :

1 2 3 4 5 6 7 12 13 14 15 16 18 19 20 21 22 24

chain bonds :

5-8 8-9 8-10 10-11 11-14 12-17

ring bonds :

1-2 1-6 1-7 2-3 2-21 3-4 3-18 4-5 4-7 5-6 12-13 12-16 13-14  
14-15 15-24 16-24 18-19 18-22 19-20 20-21 21-22

exact/norm bonds :

8-9 8-10 10-11 11-14 12-17

exact bonds :

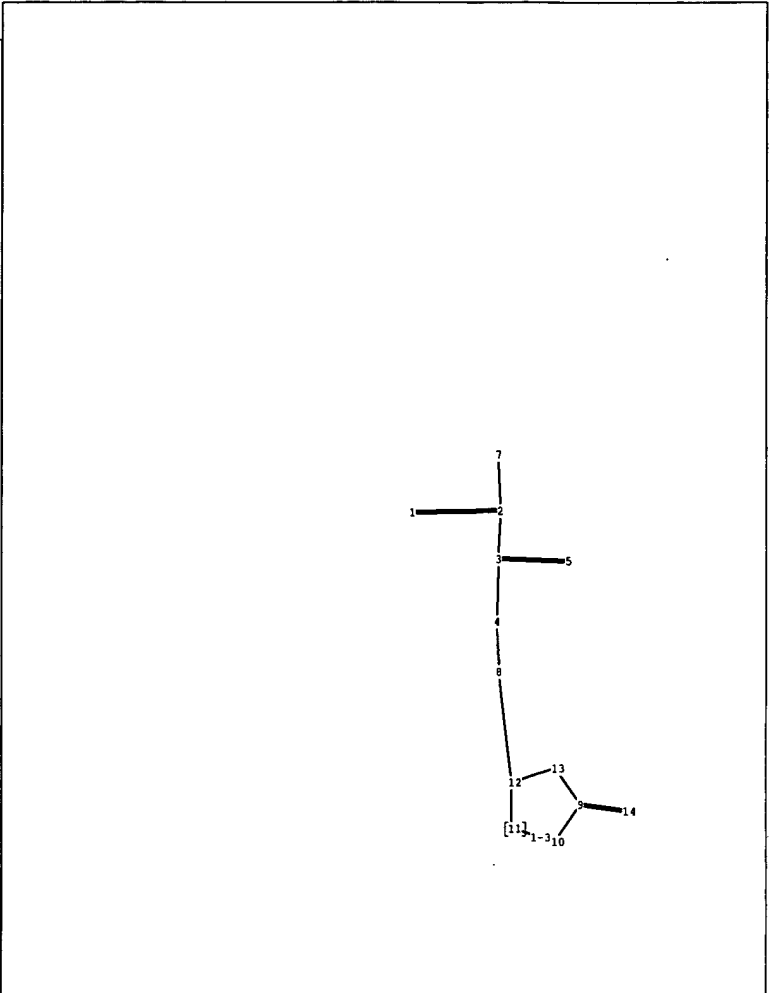
1-2 1-6 1-7 2-3 2-21 3-4 3-18 4-5 4-7 5-6 5-8 12-13 12-16  
13-14 14-15 15-24 16-24 18-19 18-22 19-20 20-21 21-22

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS  
18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 24:Atom

Element Count :

Node 11: Limited  
C,C1-5



1   2   3   4   5   7   8   14

9 10 11 12 13

1-2   2-3   2-7   3-4   3-5   4-8   8-12   9-14

9-10 9-13 10-11 11-12 12-13

2-7   3-4   3-5   4-8   8-12   9-10   9-13   9-14   10-11   11-12   12-13

1-2    2-3

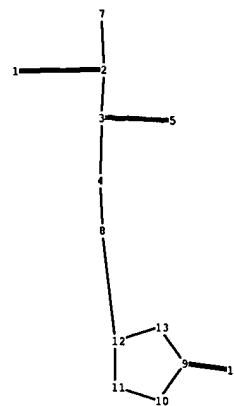
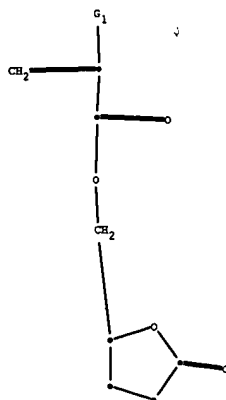
Match level :

Generic attributes :

```

Element Count :
      Node 8: Limited
      C,C1-5

```



chain nodes :

1 2 3 4 5 7 8 14

ring nodes :

9 10 11 12 13

chain bonds :

1-2 2-3 2-7 3-4 3-5 4-8 8-12 9-14

ring bonds :

9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

2-7 3-4 3-5 9-10 9-13 9-14 10-11 11-12 12-13

exact bonds :

1-2 2-3 4-8 8-12

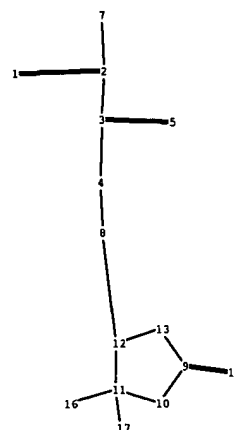
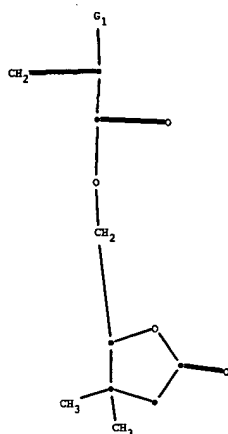
G1:H,CH3

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 9:Atom  
10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS

Element Count :

Node 8: Limited  
C,C1-5



chain nodes :

1 2 3 4 5 7 8 14 16 17

ring nodes :

9 10 11 12 13

chain bonds :

1-2 2-3 2-7 3-4 3-5 4-8 8-12 9-14 11-16 11-17

ring bonds :

9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

2-7 3-4 3-5 9-10 9-13 9-14 10-11 11-12 12-13

exact bonds :

1-2 2-3 4-8 8-12 11-16 11-17

G1:H,CH3

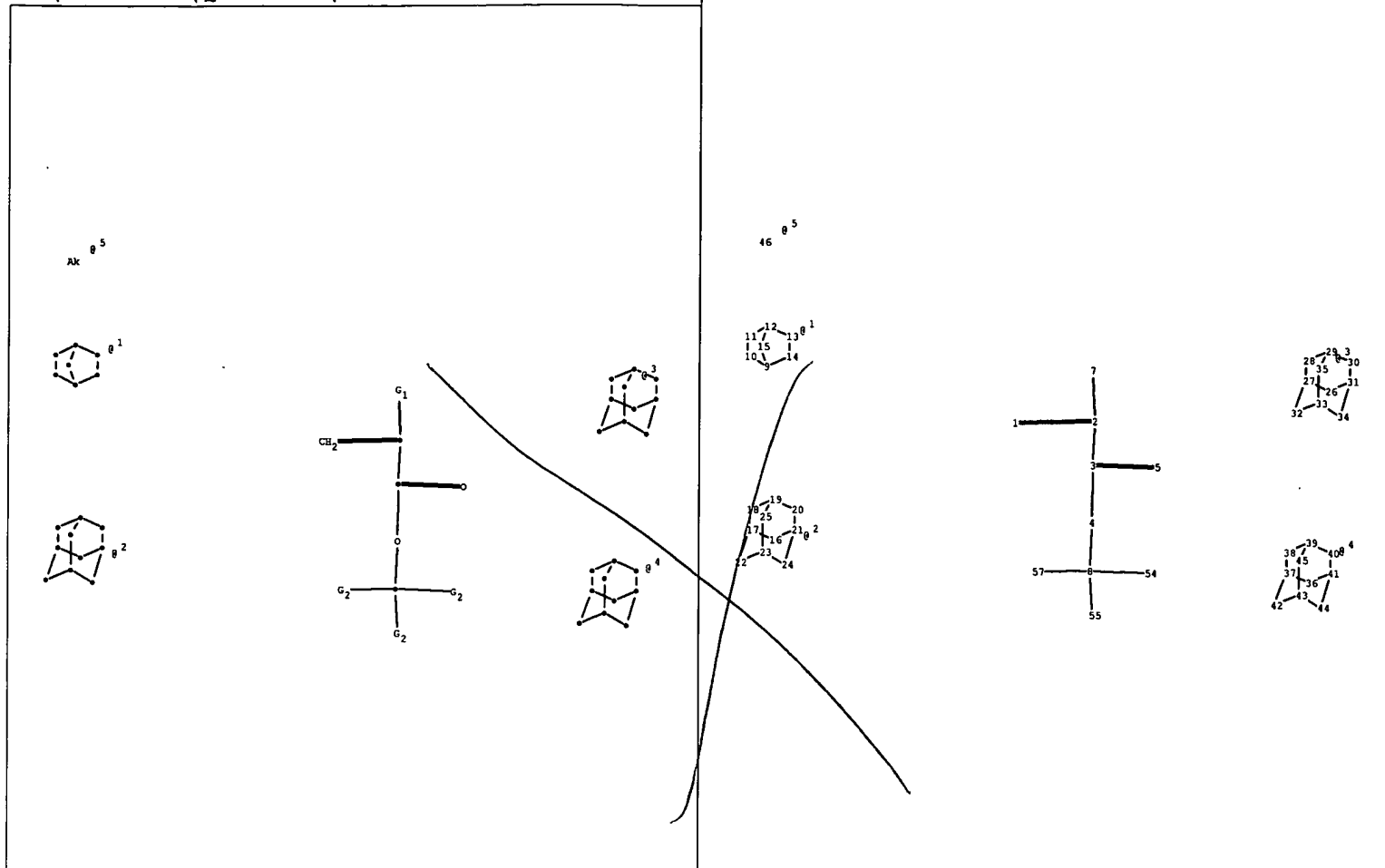
Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 9:Atom  
10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS 16:CLASS 17:CLASS

Element Count :

Node 8: Limited

C,C1-5



chain nodes :

1 2 3 4 5 7 8 46 54 55 57

ring nodes :

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27  
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

chain bonds :

1-2 2-3 2-7 3-4 3-5 4-8 8-54 8-55 8-57

ring bonds :

9-10 9-14 9-15 10-11 11-12 12-13 12-15 13-14 16-17 16-21 17-18  
17-22 18-19 19-20 19-25 20-21 21-24 22-23 23-24 23-25 26-27  
26-31 27-28 27-32 28-29 29-30 29-35 30-31 31-34 32-33 33-34  
33-35 36-37 36-41 37-38 37-42 38-39 39-40 39-45 40-41 41-44  
42-43 43-44 43-45

exact/norm bonds :

2-7 3-4 3-5 4-8 8-54 8-55 8-57 9-10 9-14 9-15 10-11 11-12  
12-13 12-15 13-14 16-17 16-21 17-18 17-22 18-19 19-20 19-25  
20-21 21-24 22-23 23-24 23-25 26-27 26-31 27-28 27-32 28-29  
29-30 29-35 30-31 31-34 32-33 33-34 33-35 36-37 36-41 37-38  
37-42 38-39 39-40 39-45 40-41 41-44 42-43 43-44 43-45

exact bonds :

1-2 2-3

G1:H, CH3

G2:[\*1], [\*2], [\*3], [\*4], [\*5]

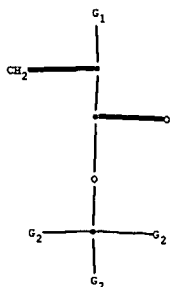
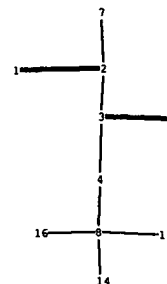
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom  
19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom  
27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom  
35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom  
43:Atom 44:Atom 45:Atom 46:Atom 54:CLASS 55:CLASS 57:CLASS

Element Count :

Node 46: Limited

C,C1-4

Ak  $\theta^1$ Cb  $\theta^2$ 9  $\theta^1$ 17  $\theta^2$ 

chain nodes :

1 2 3 4 5 7 8 9 13 14 16 17

chain bonds :

1-2 2-3 2-7 3-4 3-5 4-8 8-13 8-14 8-16

exact/norm bonds :

2-7 3-4 3-5 4-8 8-13 8-14 8-16

exact bonds :

1-2 2-3

G1:H,CH3

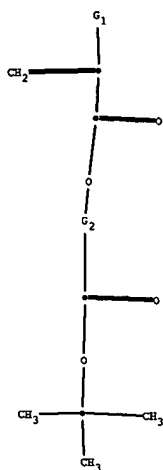
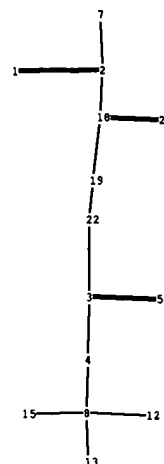
G2:[\*1],[\*2]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:Atom 8:Atom 9:Atom 13:CLASS  
14:CLASS 16:CLASS 17:Atom

Element Count :

Node 9: Limited  
C,C1-4Node 17: Limited  
C,C4-20

Ak  $\theta^1$ Cb  $\theta^2$ 9  $\theta^1$ 16  $\theta^2$ 

chain nodes :

1 2 3 4 5 7 8 9 12 13 15 16 18 19 20 22

chain bonds :

1-2 2-7 2-18 3-5 3-4 3-22 4-8 8-12 8-13 8-15 18-19 18-20  
19-22

exact/norm bonds :

2-7 3-5 3-4 3-22 4-8 18-19 18-20 19-22

exact bonds :

1-2 2-18 8-12 8-13 8-15

G1:H,CH3

G2:[\*1],[\*2]

Match level :

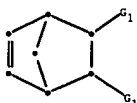
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:Atom 8:Atom 9:Atom 12:CLASS  
13:CLASS 15:CLASS 16:Atom 18:CLASS 19:CLASS 20:CLASS 22:CLASS

Element Count :

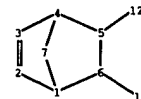
Node 9: Limited  
C,C1-4Node 16: Limited  
C,C3-15



Ak 8<sup>1</sup>



8 8<sup>1</sup>



chain nodes :

8 12 13

ring nodes :

1 2 3 4 5 6 7

chain bonds :

5-12 6-13

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-12 6-13

G1:H, [\*1]

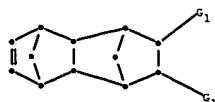
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 12:CLASS  
13:CLASS

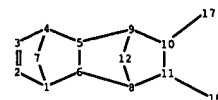
Element Count :

Node 8: Limited  
C,C1-4

AK<sup>0</sup>1



13<sup>0</sup>1



chain nodes :

13 17 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

10-17 11-18

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-9 6-8 8-12 8-11 9-12 9-10  
10-11

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-9 6-8 8-12 8-11 9-12 9-10  
10-11 10-17 11-18

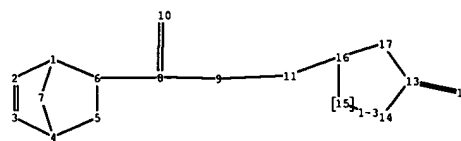
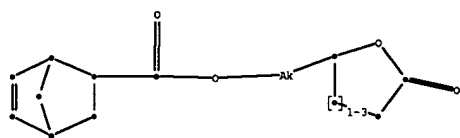
G1:H, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom  
10:Atom 11:Atom 12:Atom 13:CLASS 17:CLASS 18:CLASS

Element Count :

Node 13: Limited  
C,C1-4



chain nodes :

8 9 10 11 18

ring nodes :

1 2 3 4 5 6 7 13 14 15 16 17

chain bonds :

6-8 8-9 8-10 9-11 11-16 13-18

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 13-14 13-17 14-15 15-16 16-17

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-9 8-10 9-11 11-16 13-14  
13-17 13-18 14-15 15-16 16-17

exact bonds :

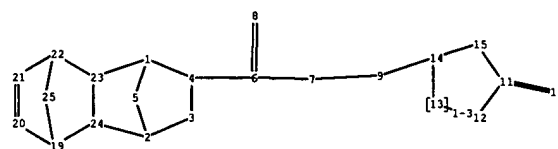
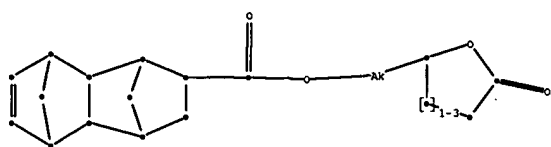
6-8

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS

Element Count :

Node 11: Limited  
C,C1-5



chain nodes :

6 7 8 9 16

ring nodes :

1 2 3 4 5 11 12 13 14 15 19 20 21 22 23 24 25

chain bonds :

4-6 6-7 6-8 7-9 9-14 11-16

ring bonds :

1-5 1-4 1-23 2-5 2-3 2-24 3-4 11-12 11-15 12-13 13-14 14-15  
19-20 19-24 19-25 20-21 21-22 22-23 22-25 23-24

exact/norm bonds :

1-5 1-4 1-23 2-5 2-3 2-24 3-4 6-7 6-8 7-9 9-14 11-12 11-15  
11-16 12-13 13-14 14-15 19-20 19-24 19-25 20-21 21-22 22-23  
22-25 23-24

exact bonds :

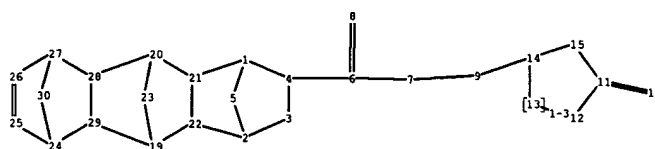
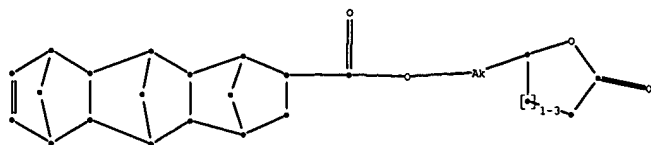
4-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS  
9:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 19:Atom  
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

Element Count :

Node 9: Limited  
C,C1-5



chain nodes :

6 7 8 9 16

ring nodes :

1 2 3 4 5 11 12 13 14 15 19 20 21 22 23 24 25 26 27 28  
29 30

chain bonds :

4-6 6-7 6-8 7-9 9-14 11-16

ring bonds :

1-5 1-4 1-21 2-5 2-3 2-22 3-4 11-12 11-15 12-13 13-14 14-15  
19-23 19-22 19-29 20-23 20-21 20-28 21-22 24-25 24-29 24-30  
25-26 26-27 27-28 27-30 28-29

exact/norm bonds :

1-5 1-4 1-21 2-5 2-3 2-22 3-4 6-7 6-8 7-9 9-14 11-12 11-15  
11-16 12-13 13-14 14-15 19-23 19-22 19-29 20-23 20-21 20-28  
21-22 24-25 24-29 24-30 25-26 26-27 27-28 27-30 28-29

exact bonds :

4-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS  
9:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 19:Atom  
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom  
28:Atom 29:Atom 30:Atom

Element Count :

Node 9: Limited  
C,C1-5